



# Using Star Ratings on the Strategic Road Network in the UK

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# How does National Highways use iRAP?

We are embedding the use of iRAP across our organisation

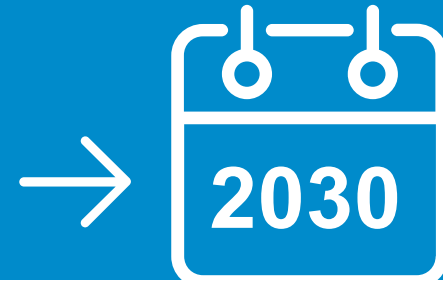
**Measure  
performance**



**Develop  
schemes**



**Plan for the  
future**



# How we are changing the way we use iRAP to measure performance

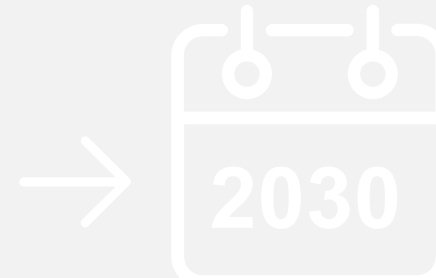
**Measure  
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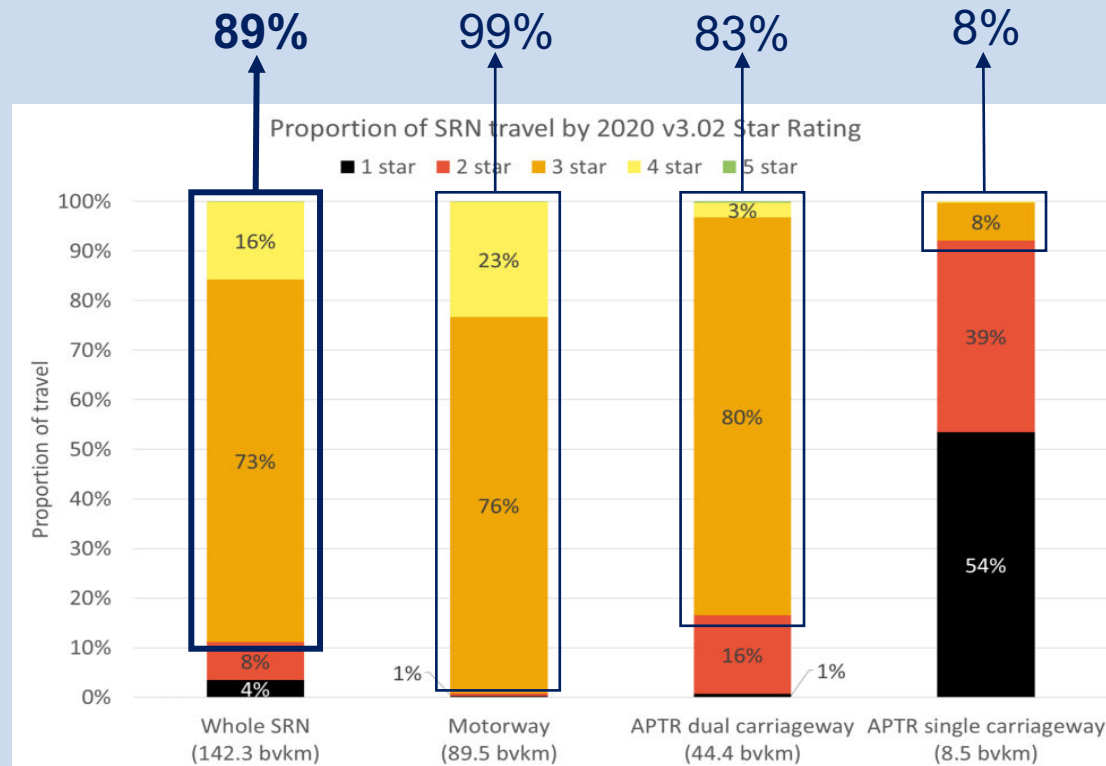


**Plan for the  
future**



# Current Star Rating

## Example metric results calculated using 2020 data



Current metric:  
**PI 1.6 The % of traffic using iRAP 3\* or above rated roads**

### Benefits

- Easy to communicate
- Emphasises the importance of a minimum safety standard
- Quantifiable link between improved Star Rating and KSI reduction

### However...

**some improvements which can substantially reduce risk are not recognised or motivated by this metric**

- No drive to improve safety on 1 & 2 star roads unless the improvements result in 3 star rating
- No drive to further improve safety on 3 star or above roads
- Disproportionate recognition for moving from high 2 star to low 3 star when risk reduction may be small

# Average Decimal Star Rating

- Uses Decimal Star Ratings, produced by splitting up each Star Rating band into tenths using the underlying risk scores
- Average is weighted by the traffic flow on each section
- Advantages:
  - Measures improvement within Star Rating bands
  - Recognises all reductions in risk proportionally, regardless of whether the 3 star boundary is crossed

## Average decimal Star Rating results calculated using 2020 data

Region	Whole SRN	Dual	Motorway	Single
East	3.4	3.3	3.8	1.9
Midlands	3.5	3.2	3.8	1.9
North West	3.6	3.2	3.7	1.9
South East	3.4	3.3	3.8	1.6
South West	3.3	3.2	3.8	1.6
Yorkshire & North East	3.6	3.5	3.9	1.9
DBFO	3.6	3.3	3.8	1.6
All Regions	3.5	3.3	3.8	1.8

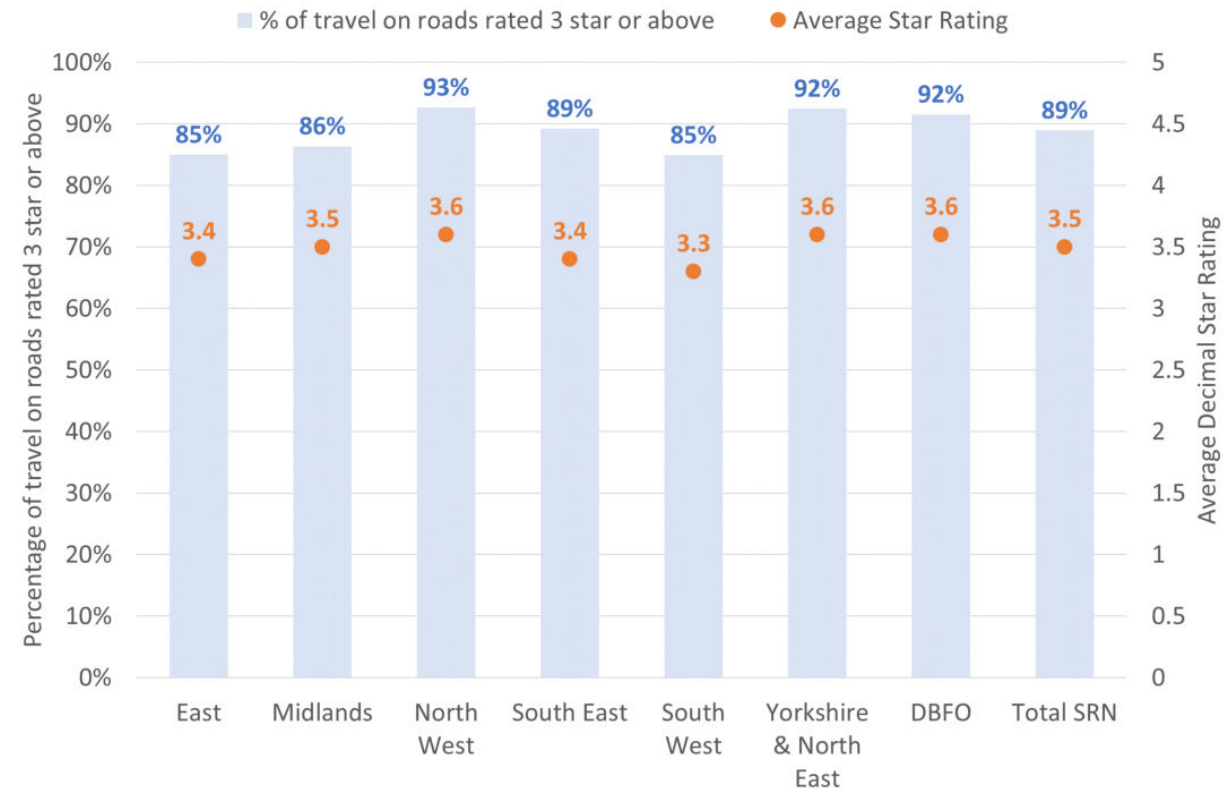
# New iRAP metric for RIS3

Combined metric – two values presented:

- % of travel on roads rated 3 star or above
- Average decimal Star Rating

- All the advantages of using average decimal Star Ratings
- But keeping the % travel on 3 star roads elements ensures we are still emphasising the importance of a minimum safety standard

Example metric results calculated using 2020 data





# Thank you

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